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JAPAN'S ENVIRONMENTAL POLICIES: THE INTERNATIONAL DIMENSION

Summary

The world's attention to ecological factors has sharpened at the same time that Japan's economic stature has mushroomed. While many positive environmental models have developed within Japan (for energy efficiency and recycling, to name two), a less favorable image has clouded the initial picture of its international environmental policies. On the controversial issues of species protection and timber management Japan has been slower than some other industrialized nations to recognize that fulfillment of economic -- and sometimes political -- goals can pose long-term environmental pitfalls.

Yet Tokyo's hesitation to act has less to do with an insider's lack of concern for the outsider's problem and more to do with never before being faced with a leadership role in these areas. Japan's ability to change is evident in a variety of ways. And, evidence is growing that Japan is willing to play a role in helping developing nations achieve sustainable development and cope with global environmental problems, like destruction of the atmospheric ozone layer. Many also are looking to Tokyo to contribute to discussions between industrialized and developing nations on how to resolve worldwide environmental problems without undermining national sovereignty. Whether Tokyo will exercise a firm hand to prod Japanese corporations to accept global environmental responsibilities as well will be key to shaping the country's final ecological image as either a negative or a positive.

Overview

Called an "ecological outlaw" by Newsweek magazine and castigated in other international media reports for a variety of perceived environmental abuses, Japan suffers from an image problem. These abusive arrows target two main areas where Japan's external practices have caused alarm: species preservation and timber management. In the first instance international nongovernmental organizations have been extremely effective in raising awareness of the possible extinction of whales and elephants. Somewhat related is the concern raised by fishermen and their governments over the possibility that driftnet fishing, employed extensively by Japanese, Taiwanese and South Korean fishermen and on a smaller scale by some Americans, is wreaking havoc with fish stocks in the oceans. On these issues Japan's response has been mixed, appearing defensive at times and pragmatically flexible at others.

Timbering practices have flourished as an issue under the attention paid to global warming, the term given to the projected increases in temperatures caused by higher levels of such greenhouse-acting gases as carbon dioxide, methane and chlorofluorocarbons. The devastation of tropical rain forests is linked further to global warming since fewer trees are available to absorb CO_2 emissions; moreover, smoke from any forests burned to clear fields for agricultural uses also adds to CO_2 pollution. Japan's role in this controversy stems from its position as the world's largest importer of tropical hardwoods. In addition, Japanese companies in the past have aided less economically fortunate neighbors in Asia in developing their forest products industries, although environmentalists have questioned whether this help ultimately hurt. Prospects for aligning global environmental concerns with indigenous economic goals rely, in part, on Japanese willingness to broker compromises.

Although other industrialized nations pursued advantages in eras when there always seemed to be a new frontier, both the world and its resources seem to have shrunk. As world population has climbed, so have the number of toes that can be trampled in the name of commercial expansion. Nongovernmental organizations have sprouted to protect a myriad of causes, many of them controversial. Japan, which formerly pursued its search for resources with little attention to ecological factors, now is called on not only to weigh the possibility of environmental degradation from its own actions but to caution other countries to consider the environmental impact of what they do.

Some who hear Japan being urged to serve as the middleman for boosting the Third World's attention to environmental measures may conjure the image of a fox guarding the henhouse. In financial terms Tokyo certainly is ready to commit resources. Political leadership, too, is increasing, as seen in the government's role in the Intergovernmental Panel on Climate Change, organized by the United Nations, and its joint sponsorship with the U.N. Environment Program of a 1989 environmental conference. On several fronts, though, the financial and political leadership exercised by Japan has been at odds with some of the goals of international environmental groups. As the country develops its global leadership abilities, its renowned spirit of consensus and government-business coordination may work out compromises acceptable to all parties.

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Mixed Signals on Species Preservation

Japan has approached its harvesting of the oceans and, to a degree, trade in endangered species from a pioneer-society mentality, rendered more acute by its own limited supply of natural resources. Given this view, the country is no different from many other pioneers who sometimes recklessly have hunted, mined or fished. While those familiar with Japanese culture may claim that Japan's environmental actions are based on its uchi/soto (inside/outside) response to situations, this reasoning fails to recognize that many strong nations have acted similarly as they have imposed their will on areas that appear, or are, lightly regulated. A pioneer society and the uchi/soto mentality are similar in that both fail to treat external resources as finite. Yet the pioneering society usually progresses to a higher level of cooperative maturity. In some areas Japan is beginning to show signs of that maturity. Nevertheless, cultural explanations frequently surface for some disputed practices, such as whaling.

Whales - Cursory reading of the popular press in Japan shows that support for whaling stems from wanting to retain the heritage of some seaside villages and the role of whale meat as a source of food. The more academic press questions whether the moratorium placed on commercial whaling in 1982 by the International Whaling Commission (which took effect in 1986) is based on sufficient scientific information. Also hinted at by a few Japanese is a suspicion that the moratorium reflects other nations' unspecified political goals rather than concern for depleted whale stocks.

Japan acquiesced to the IWC's commercial whaling moratorium in the 1987/88 season. But under a provision of the IWC convention regulating whaling, Tokyo is carrying out research on minke whales. The result is not only a count of these whales but selective killing of about 300 a year to determine age and sex, from which scientists hope to calculate population patterns. Japan's ultimate goal is to prove that the minke whale is not endangered and, in fact, that its population is increasing. A review of the moratorium is set for this year, although researchers do not expect to have sufficient data ready by then.

The year the commercial moratorium took effect, Japanese fleets reportedly harpooned 1,941 minke whales. In the 1987/88 season, the first year of its research, the Tokyo program initially called for taking 825 minke whales; a resulting outcry prompted the kill to be limited to 273, as reported by the Institute of Cetacean Research set up by the Ministry of Agriculture, Forestry and Fisheries. The following season 241 minke whales were examined. At the June 1989 IWC meeting Tokyo reported plans to kill and dissect about 400 minke whales this next season. The government provided Y350 million ($2.5 million at Y140=$1.00) toward the 1987/88 research, which cost an estimated Y1.7 billion ($12.1 million). The sale of whale meat offset about Y1.3 billion ($9.3 million) of project costs, while private contributions from whaling companies covered the remainder. The 1988/89 season's research cost an estimated Y2 billion ($14.3 million).[1]

[1]Fukuzo Nagasaki, "A Disguised Commercial Operation? The Costs of Scientific Whaling," Science & Technology in Japan, July 1989, p. 37.

The main contention underlying Japanese support for whaling is that not all species are in danger of extinction. The executive director of the Institute of Cetacean Research has written that if the IWC partially lifts its commercial whaling moratorium ". . . Japan will only harvest the relatively plentiful minke whale. We believe that stocks of other species, in particular the Bryde's whale, may be sufficient to support future exploitation, but population analyses are presently insufficient. In fact we have no clear idea of stock size for any species other than minke."[2] However, Japan has been accused of taking more than minke whales in its research. And some question whether the country's whaling fleets would go after some of the other five species that Japan listed as an exception to its recognition of their endangered status under the Convention on International Trade in Endangered Species of Wild Fauna and Flora, known as the Washington Treaty.[3]

Since only Norway and Japan retain research projects for whaling (Iceland agreed last August to give up its program), the pressure on both to put away their harpoons has intensified. Norway killed 29 whales in 1988 and projected taking 20 in 1989, according to a report out of the IWC's June meeting. Comments at that session were mixed; the more liberal general session criticized all the researchers and called on them to end their programs, while some members of the science committee, which met before the general session, were said to have praised Japan's survey, particularly the population count, which did not involve killing whales. Adding to the uncertainty over the future of whaling is Japan's acknowledgment that while the minke population appears to be increasing (estimated at 700,000 in 1988-89 surveys), the higher figures could result from the researchers' use of better methods than those formerly supplied by commercial operations.

The push will be on before the July 2-6 IWC meeting in the Netherlands as Tokyo assesses the international political opposition to whaling in light of the value of sustaining one of its traditional industries. Apparently not ready to lend much credence to one proposal for "whale farms" as a way to preserve the species, Tokyo will have to decide whether its minke research is accurate and deserving of continued support or whether political concessions as they relate to the broader fishing industry carry more long-term gains. Since few in Japan have rallied to "save the whale," preservation itself is likely to be a small factor in Tokyo's final response. Further threats from Washington and other capitals to withhold fishing rights, a tactic reportedly used to help gain compliance with the IWC commercial moratorium, push the decision into the realm of political compromise.

Driftnet fishing - The use of miles-long nets to increase a fishing fleet's catch exemplifies a pioneer-society mentality. These new tools exploit

[2]Fukuzo Nagasaki, "The Facts, 'Facts' and Fiction of Scientific Whaling," Science & Technology in Japan, July 1989, p. 37.

[3]Japan has filed exemptions under the CITES treaty on six whales: sperm, sei, Bryde's, fin, Baird's minke and minke. All are listed as endangered. Researchers reporting on selected whale populations at the June 1989 IWC meeting estimated that no more than 20,000 sperm whales survived as against earlier reports of 1 million, while the number of fin whales had dropped to 5,000 from a 1976 count of 100,000.

what seems to be a plentiful resource in the oceans. But opponents say they snare whales, dolphins and other off-limits species as well as sea birds feeding in the ocean. This leads, critics say, to the equivalent of ocean strip-mining. Proponents of the nets say they are designed to allow certain species to escape, and the Japanese maintain unintended catches are few. Until there is scientific proof that driftnet fishing threatens to deplete fish stocks, Japan has indicated its belief that the method causes no more harm than other methods and supports research to clarify the issue.

Another issue involving driftnets is that certain species of fish are off-limits in that they are considered the "property" of the nation in whose waters they spawned. Unintended catches are supposed to be tossed back. Since driftnets are not emptied frequently, stray fish or mammals caught in the nets are not guaranteed survival. West Coast American fishermen have appealed to their congressmen, however, claiming that foreign driftnets caught enough off-limits salmon to seriously restrict domestic catches in 1988 and 1989. They claim that interception by driftnets cut their catch of tuna and salmon from an estimated 17,000 tons a year in the early 1980s to about 4,000 tons in the late 1980s and possibly only 2,500 tons in 1989. To ward off accusations of pirating these forbidden catches, Japan has agreed (as have South Korea and Taiwan) to monitoring in the North Pacific. However, legislation originating from these complaints is pending to ban imports of fish caught in driftnets.

In addition to agreeing to the monitoring, Tokyo has shown its willingness to bend by cutting back the number of boats (from 60 to 20) using driftnets in the South Pacific (see JEI Reports No. 8B, February 23, 1990, and No. 20B, May 19, 1989). Moreover, in a compromise with the United States at a December 1989 United Nations meeting, Japan agreed that if no method can be found to avoid catching sea mammals in driftnets, then it would forgo their use. The deadline to avoid such a ban is June 1992. A July 1991 deadline would limit use of driftnets in the South Pacific. Tokyo also has suggested creation of an international commission to regulate regional fishing. The driftnet controversy is part of a larger problem facing fishing nations, which are being forced into open waters as more domestic fleets succeed in pressuring their governments to restrict access in their 200-mile economic zones (see JEI Report No. 16B, April 16, 1989).

As with many issues, driftnet fishing concerns more than just resource preservation. However, nations accused of exploiting a resource face not only the frustration of commercial interests, with which they are used to dealing, but the wrath of environmentalists as well. Japan, where international environmental lobbies are rare, faces a relatively unknown antagonist. But Tokyo has shown it can be swayed by international environmental opinion, particularly in its approach to some of the endangered species listed under CITES.

Elephants and other endangered species - In the eyes of those concerned about extinction of various animals, Japan may have redeemed its past trade in endangered species -- at least partially -- with a decision last year to comply with a ban on ivory imports. When the proposal to ban trade in ivory was debated at an October 1989 CITES conference, many expected Japan, which had been consuming an estimated 40 percent of the world's ivory exports, to oppose listing the African elephant as an endangered species under the most restrictive appendix. Despite the efforts of some African nations to carefully manage their herds, Africa's elephant population had declined from an estimated 1.3 million

to roughly half that in just 10 years. Japan could have sided with these nations. And, in fact, Tokyo's delegate did not vote in the first balloting when 76 of the 91 nations represented there voted for the ban. Furthermore, Tokyo briefly considered whether to file an exemption to the appendix, which would have allowed trade in legally obtained elephant tusks with other countries that had filed exemptions. In the end, though, members of the Japanese cabinet decided to avoid the international opprobrium that might accompany continued ivory trading.

When the ban took effect this past January, Japan simply continued what had been a temporary ban enacted in September. Some conservationists criticized Tokyo's gradual tightening of restrictions. They noted that a June 1989 decision to allow imports of raw ivory only from the country of origin had resulted in traders buying almost a half year's supply of ivory in a two-month span. The influx of 60 tons brought supplies to about 110 tons by the time the temporary September ban took effect, meaning the 30,000 ivory craft workers in Japan had slightly less than their previous year's supply of roughly 140 tons.

With both Hong Kong and China deciding in January to ignore the CITES trading ban, some worry that Japanese ivory traders could have illicit access to further supplies. (Airport confiscations in November and December netted various amounts of ivory being smuggled into the country.) Moreover, since the CITES restrictions will be reviewed in two years, analysts have suggested that Japanese ivory workers might be able to survive until then on stockpiles. Japanese sources say, however, that international concern over the elephant probably will outweigh demands of the Y20 billion ($142.9 million) a year domestic industry, which either will have learned to deal with substitutes or have moved into other fields.

After the Diet passed a law in 1987 to regulate traffic in endangered species, customs officials were able to increase surveillance; in 1989 they confiscated 9,799 items listed under CITES. What worries conservationists, however, are the endangered species for which Tokyo has requested an exemption from trade restraints under CITES. These include the hawksbill turtle, olive ridley turtle, the Bengal monitor (lizard) and the yellow monitor. Craftsmen use the turtle shells and the lizard skins primarily for fashion accessories.

Prohibited trade in live animals, too, has flourished in Japan. A noted recent case involved 58 wild animals, including three rare slow lorises, which Japan returned to Thailand. News reports called the event the largest return at one time of rare species to their native lands. Some of the animals had been confiscated in 1986 and kept in state custody since then. Wildlife conservationists are urging governments not only to confiscate the animals but to bear the costs of returning them. For its part, the Ministry of International Trade and Industry has responded to the indignation of wildlife advocates by attempting to beef up customs inspections. Adding to the difficulty of spotting illegal documents is the increasing professionalism of importers. One MITI official was quoted as saying, "Like drug trafficking, the trading of rare animals is becoming a new source of funds for criminal organizations."[4]

[4]Yuko Inoue, "Japan a Thriving Market for Endangered Species," Japan Economic Journal, July 15, 1989, p. 28.

Tokyo hopes to show an improved record against such smuggling before the next CITES meeting in the spring of 1992. That meeting, to be held in Japan, may reflect Tokyo's willingness to participate more actively in global conservation matters. Coinciding with its bid for the conference, Japan agreed to abide by the CITES prohibition against trade in saltwater crocodiles. Tokyo's decision to go along with the ivory ban also was considered key to winning the conference, the first in Asia since 1981.

The Impact of Hardwood Hard Knocks

A country renowned for its long-term views in business management might be expected to encourage reforestation by its suppliers of wood and pulp. This might seem even more logical if that country happened to be the world's largest importer of tropical hardwoods. As Japan's wood traders have hopscotched in search of supplies -- relying heavily on the Philippines, then Indonesia, then Malaysia and now Papua New Guinea -- the main sources of tropical hardwoods have shrunk; easily accessible timber has been depleted or governments have revised their export policies. Japanese importers continue to look for additional supply sources, including Brazil, but new attention to the impact of deforestation on global warming has added to the scrutiny of Japanese forest products importers and their past practices. So-called tree huggers who have criticized Japan and called for boycotts of tropical timber are finding that they are shaking out a hornet's nest of commercial and sovereign issues.

Getting the picture - Some criticisms of rain forest depletion are based on unclear data. Clearer, however, is Japan's trend toward new sources of supply and a regional history short on ecological practices.

- A statistical problem - Getting to the root of deforestation is problematic. Rough estimates say about 27.9 million acres of the earth's 2.9 billion acres of tropical forest are destroyed annually. The lack of a clear picture of how much is destroyed, how much goes for unreported local uses and how much goes into commercial sales contributes to heated discussions that tend to overlook a basic point. A sustained management plan for a forest would help offset the destruction and protect indigenous populations, government sovereignty and users of the forest's resources.

Stung by criticism connecting Japan's wood demand with the depletion of Southeast Asian forests, the Foreign Ministry pointed out last year that Japan takes only a small proportion of the total wood cut, about 2 percent or 458.8 million cubic feet out of the 22.9 billion cubic feet produced. Only about 4.5 percent of the total Southeast Asian cut is exported, the ministry reported, with the rest either processed for local use or used for fuel. Some forests are destroyed through slash-and-burn field-clearing for agriculture, although fewer Southeast Asian forests are affected by this method than, for example, those in Brazil.

Further complicating the tally of shipments, according to a study by the World Wide Fund for Nature -- the world's largest conservation group and parent of the World Wildlife Fund, is a discrepancy between amounts shipped and amounts received. The authors of a 1989 report suggested that Japanese companies have helped local Papua New Guinea loggers avoid government taxes or royalties through "transfer pricing" programs that pay a middleman for actual

shipments, which are recorded out of port at lower quantities.[5] To help clarify at least the extent of deforestation, the Agriculture Ministry has asked that its FY 1990 budget be funded for a Y300 million ($2.1 million) five-year study that would use a satellite to map changes in Southeast Asian forestry resources.

• A search for supplies - With the world's largest share of tropical hardwood imports (about 30 percent), Japan has an important stake in obtaining continued supplies for its construction, paper and pulp and furniture-making industries. Currently, Japan imports about 727 million cubic feet of tropical hardwoods a year, primarily from the Malaysian states of Sarawak and Sabah (but not Peninsular Malaysia, which has restricted exports of logs) and Papua New Guinea (the only Southeast Asian timbering state without government-set limits on logging). In the past Japanese traders tapped Indonesia and the Philippines, but both countries have imposed bans on log exports, although shipments reportedly are continuing illegally. (The bans are not necessarily due to concern for sustaining forests but to decisions to export value-added wood products.)

• Ecology not a past priority - Criticism over the trade in timber has focused primarily on accusations that the supplying country has not managed its forests well. Japanese foreign aid practices also have been targeted for not requiring adequate environmental impact assessments, resulting in some cases of commercial gain at the expense of the environment. Both issues involve a scarcity of trained personnel, either in the country trying to oversee its logging operations or in Japan's offices that handle foreign aid projects.

The WWF report, Timber from the South Seas: An Analysis of Japan's Tropical Timber Trade and its Environmental Impact, pointed to three props that have kept timber production high: "Once logging has started, the loggers (who have borrowed heavily), trading houses (who have engaged funds) and the authorities (who are starting to receive taxes and royalties) cannot curtail their operations because they have so much at stake."[6] Japan enters into that equation through its trading houses and other companies that either are in partnership with logging operators, are their capital suppliers or contract with them for timber yields. However, even if Japanese firms pushed for a greater environmental component in timbering operations, the loggers and the local authorities remain in charge of the final outcome.

Focusing on ways to change - Sustainable management principles and changes in consumption patterns that rely less on hardwoods have been suggested as two ways to prevent decimation of tropical rain forests. While exporting governments agree with the need for good husbandry, they resent the implication from critics that they do not already require good forestry techniques. The International Tropical Timber Organization -- a United Nations affiliate based in Yokohama -- has cited specific operations in Malaysia, the Philippines and Indonesia as having good track records. However, ITTO also noted in a 1988 report that proper management methods are used in less than 1 percent of all tropical forests.

[5]Francois Nectoux and Yoichi Kuroda, Timber from the South Seas: An Analysis of Japan's Tropical Timber Trade and its Environmental Impact (Gland, Switzerland: WWF International, April 1989), pp. 73-74.

[6]Ibid., p. 71.

A WWF recommendation to alter consumption patterns encompasses a suggested boycott of tropical timber logged by operations that engage in questionable management practices. (The actual proposal is to mark the hardwood product so that consumers can respond by buying timber from properly managed forests.) Another consumption-related suggestion calls on Japan to use more softwood for plywood and especially for construction frames (konpane), which are used and then tossed.

Exporting governments angrily condemned the WWF boycott proposal, which some European countries are considering. Indonesia's forestry minister visited five nations late last year to ward off a boycott and urge increased help in forest preservation. Hasjrul Harahap, who doubled as a representative of the Association of Southeast Asian Nations on his tour, suggested sinister reasons were behind the proposed boycott. Beyond taking a position that nations have a right to develop their resources as they see fit, Mr. Harahap warned that the motive for the boycott may lie in the desire of softwood exporters to get consumers to replace hardwood purchases with softwood. This charge appeared indirectly aimed at the United States -- Japan's biggest forest products supplier -- since Washington is pushing under the Super 301 provision of the 1988 Omnibus Trade and Competitiveness Act for revisions in Japan's tariffs on plywood and other panel products, classification codes and building standards to clear the way for increased imports of U.S. wood products (primarily softwood).

Chipping in with funds and guidelines - Japan's response to the depletion of rain forests has been primarily to dig into its wallet. Under its flagship environmental financing package announced in July 1989 at the annual summit of industrialized nations, Y300 billion ($2.1 billion) in foreign aid will be targeted for environmental measures over the FY 1989-FY 1991 period; some of it will go specifically for reforestation projects. Japanese aid already has provided either grants or technical assistance to 17 projects involving surveys, reforestation programs or training centers in various African, Southeast Asian and South American countries. Six of these have been completed and 11 are ongoing.

The Foreign Ministry incorporated in its FY 1990 aid request approximately Y1.3 billion ($9.5 million) to fund an ITTO program for preserving forests and about Y300 million ($2.1 million) to finance a program supplying technical experts to developing countries. Furthermore, ITTO is expected to receive a supplemental FY 1989 appropriation of Y2.7 billion ($19.3 million) for help in launching a world forest fund. Also, a coalition that includes the Foreign Ministry and the Environment Agency formed the Japan International Association for Mangroves in September 1989 to research and provide information geared to protecting the swampland tree systems unique to Southeast Asia. An unspecified amount of financial aid is to be provided to the institute. Japan also contributes indirectly through other multilateral groups like the Tropical Forestry Action Plan of the U.N.'s Food and Agriculture Organization and the U.N.'s Environment Program, to which it is the second-largest contributor after the United States.

Even forest products trading firms are contributing financially, although they reportedly have said they will not alter their practices. Through the Japan Lumber Importers Association traders have contributed Y10 million ($71,400) to ITTO to help protect rain forests.

Perhaps partly in response to criticisms of its foreign aid programs, Japan has renewed its attention to environmental assessments, beginning with the initial request for aid. In late 1989 the Overseas Economic Cooperation Fund, which administers all of Japan's foreign aid loans, issued a set of guidelines aimed at weighing environmental factors along with development proposals. Prominent in the guidelines is the need for participation by the country requesting aid. However, to deflect criticisms that Japan might slough off addressing ecological impacts whenever a potential recipient had no environmental regulations or administrative guidelines, OECF promised that Japanese standards or those of other countries or international organizations would be used in consultation with the requesting government.

The standards for forestry-related projects, in particular, require an assessment of the project's impact on the surrounding ecosystem, including the watershed, as well as the potential contribution to global warming (as it relates to carbon dioxide, for example). Further studies are urged for the impacts on plants, animals and insects. Additionally, OECF is pushing for consideration of human environmental issues: the effects on farmers, the impacts on cultural or religious heritage and the project's relation to land ownership or community rights.

The tropical timber issue provides a classic example of how Japan can switch from a pioneer approach to one more in line with its ability to use its own financial resources for improving the commonweal. Emanating from its strength as the world's largest source of funds, Japan is exercising more political leadership as well.

Taking a High-Profile Role on Global Environmental Issues

Japan was by no means a laggard as industrialized nations began to raise environmental banners late in the 1980s. Its 1988 white paper, Japan's Contribution Toward the Conservation of the Global Environment, offered an outline for future actions. Moreover, Japan joined with the other Group of Seven industrial democracies in their July 1989 call for increased attention to environmental matters. In addition, it has participated in the work of the Intergovernmental Panel on Climate Change to promote ways to address carbon dioxide. Its plan to eliminate chlorofluorocarbons accused of depleting the ozone layer could be cited as a model for other nations. And not to be outdone by other countries staging environmental gatherings, Japan joined with the U.N. Environment Program to sponsor a sustainable development conference last September.

Outline for action - The Environment Agency's 1988 white paper emphasized two of Japan's strengths in dealing with global environmental measures: financial aid and technological prowess. The paper also promoted cooperation with nongovernmental organizations and supported the transfer of appropriate energy-efficient technologies by multinational companies to their Third World subsidiaries.

With Japan increasing its overall foreign aid disbursements -- penciling in $50 billion for the 1986-90 period (see JEI Report No. 41A, October 27, 1989), environmentalists worry that pollution-creating or resource-depleting projects will dominate despite pleas for environmental attention. Not even the ¥300 billion ($2.1 billion) announced specifically for environmental projects over the FY 1989-FY 1991 period will prove effective if skilled environmental technicians are not available to evaluate programs. A call from the Environment

Agency for experts last May netted only 200 names. Given the increased emphasis on environmental monitoring, the bureaucracy may be able to enhance its own downstream training potential by encouraging multinational corporations to beef up their ecologically attuned staff.

Underlying the white paper's sense of what Japan could do through financial and technical aid was a recognition that developing countries seldom make environmental concerns a high priority in relation to industrial development. Tokyo's past aid policy of emphasizing project origination from the requesting country easily could ignore the environmental element, the paper suggested. Thus, ". . . the Japanese government should make flexible use of this principle, enlightening these countries about the importance of environmental problems, and actively working on these countries to assist them to draft projects for conservation of the environment" in ways that meet the needs of the countries.[7] A similar attention to sustainable development resurfaced in both the G-7 communique from Paris and as the theme of the Tokyo conference in September.

Front-line positions - Last year's summit meeting of the heads of the seven leading industrial democracies provided the setting for Japan to officially announce its Y300 billion ($2.1 billion) three-year commitment to environmental projects (of which the Foreign Ministry said in September more than one-third already had been disbursed). The third of the communique that described the group's environmental concerns basically reiterated previous positions: support for preservation of forests and assisting developing nations to achieve sustainable development plus concern over global warming and ocean pollution, among others. The August 1989 response from a Foreign Ministry task force, established to follow up on the summit report and to prepare for a September environmental conference in Tokyo, was somewhat more to the point. It urged a phaseout of CFCs as soon as possible before the year 2000 and further study of the greenhouse effect, including analysis of worldwide carbon dioxide levels as well as implementation as soon as possible of energy conservation and efficiency measures that reduce CO_2 emissions. The other task force recommendations reinforced aid philosophies.

Tokyo already is moving toward a CFC phaseout. Most scientists suspect that the chemicals, used to produce foam, aerosols and refrigerants as well as to clean electronic equipment, are destroying the earth's ozone layer that protects against too much ultraviolet light striking the planet. As a signatory to the 1987 Montreal Protocol, Tokyo accepted initial CFC cutback proposals and has agreed to proposals made in Helsinki last year to work toward elimination of CFC use by the year 2000. Specifically, the Ministry of International Trade and Industry has drafted a strict schedule that calls for cuts within three years to 80 percent of the production and use figures of 1986, further tightening the limits to 50 percent by the 1995-96 period, 15 percent by 1998 and a total phaseout by the year 2000. The timetable is to be presented at a March 8-14 meeting in Geneva. Several Japanese (as well as American) firms have developed chemicals that can substitute for CFCs, thus decreasing the economic impact of the phaseout.

[7]Environment Agency, Japan's Contribution Toward the Conservation of the Global Environment, May 1988, p. 73.

Japan has taken an active role in global warming issues through the Intergovernmental Panel on Climate Control, where it coordinates the energy and industry subcommittee for solutions on carbon dioxide emissions. Neither Tokyo nor Washington was willing to set a timetable for CO_2 cutbacks as pushed by several European nations at a November conference in the Netherlands (see JEI Report No. 44B, November 17, 1989). Instead, they promoted waiting to see what measures IPCC would suggest in its October 1990 report. Various proposals submitted to IPCC reportedly have shown few countries actively seeking to decrease their CO_2 emissions, sources say. Japan's proposal emphasizes energy efficiencies and technological innovation to limit increases in CO_2 emissions.

A Y1.2 billion ($8.6 million), six-year study coordinated by the Environment Agency on the effects of global warming, ozone depletion, ocean pollution, desertification and acid rain will not be complete by the time IPCC makes its recommendations. However, the information is to be used in making plans for changing climatic conditions as well as other policies.

Japan also has been active in studying how to minimize methane emissions (formed in rice fields, given off by the decay of garbage, produced by combustion plants and a simple result of livestock flatulence). A 1989 Environment Agency report presented to IPCC noted that Japan produced about 1.1 million tons of methane a year. U.S. studies have suggested that methane actually could contribute more to global warming than CO_2 because its rate of increase is higher. A February IPCC meeting included methane reduction discussions, which will be explored in more detail at an April 9-13 meeting in Washington.

At the September 1989 Tokyo Conference on the Global Environment and Human Response toward Sustainable Development four familiar recommendations emerged: increase information to decrease the uncertainties about global environmental issues; develop and share technology to cope with issues of degradation; provide funding for sustainable development; and strengthen the abilities of international and regional organizations to respond to problems. Although the conference did not reverse the usual rhetoric, the scientific and official representatives addressed the importance to the environment of alleviating poverty and inequity in Third World nations (see JEI Report No. 36B, September 22, 1989). The conference also generated controversy through a decision to limit attendance primarily to scientists and government officials. Thus, representatives of many nongovernment organizations staged their own conference that ended up raising questions about some of Japan's environmentally questionable actions in Southeast Asia but also underscoring the need for a cooperative approach to sustainable development.

Money Doesn't Necessarily Buy Love

From all parts of the globe the cry is heard in Japan: money, money, money. Missions visit Mexico and Poland to study air pollution. Officials contact Asean nations to coordinate environmental aid and sit down in Eastern European capitals and Moscow to discuss a variety of environmental concerns. While Japan has expressed its willingness to provide aid, a variety of cautions slow the process, including a variation on the theme "money can't buy love," since not all aid projects win kudos.

Among the proposals for tapping Japan's economic might on behalf of the environment is a debt-for-nature swap, in which a creditor buys usually

discounted debt and, ideally, converts it into the currency of the debtor nation for an amount somewhere between face value and the discounted price. The converted funds then sponsor a conservation project, often determined by a conservation group within the debtor nation.* The communique from last summer's summit meeting noted, "In special cases, [official development assistance] debt forgiveness and debt-for-nature swaps can play a useful role in environmental protection." However, sovereignty issues occasionally flare over the concept; for example, Brazil's then president angrily denounced as an affront to Brazil's sovereignty proposals by environmentalists last year to buy some of the country's massive debt in exchange for rain forest preservation. Japan's traditionally cautious approach to debt reduction (see JEI Report No. 6B, February 9, 1990) indicates this measure will not soon gain popularity in Tokyo.

One attempt at linking its aid to environmental issues actually worked in the reverse as Tokyo allegedly reminded 13 South Pacific nations of the amount of Japanese aid they were receiving. Representatives had met in July 1989 in Tarawa, Kiribati to seek a ban on driftnets in the South Pacific. Australia and New Zealand, which are also members of the South Pacific Forum, leveled accusations at Tokyo of "checkbook diplomacy," which may cool similar attempts in the future.

Despite allocations of $193 million for bilateral and multilateral environmental preservation efforts in 1986, $335 million in 1987 and $797 million in 1988, Japan's seemingly thick wallet is not always appreciated. In one much reported case Japanese foreign aid contributions were linked to construction of a road in Sarawak. When Penan natives of the area blockaded the road to keep loggers from entering the area, Malaysian authorities arrested slightly more than 100 men, women and children, according to news reports. The Penans say logging in their ancestral lands has eroded soil, polluted waterways and disturbed fisheries. That the road had been built ostensibly to help Penan proved fodder for those who question how well Japanese foreign aid officials evaluate projects. In another case Japanese participation in a reforestation project in Thailand has drawn complaints from farmers there who dislike the idea of fast-growing eucalyptus being used since the trees' root systems interfere with nearby crops. And Japanese companies that are urged to share technology may find that their wealth only buys them a bad image if that technology ends up causing pollution.

Technology, however, also may be the key to counteracting environmental degradation. Tokyo hopes to pressure industries to transfer antipollution technologies abroad as well as possibly clean up their act overseas, if necessary. Fiscal policies, such as a surcharge on hardwood timber imports, also have been suggested as a way in which Tokyo can work to sway the environmental policies of industry. Tax incentives have been proposed by Keidanren (Japan Federation

*Last year the World Wildlife Fund and the Nature Conservancy bought from U.S. creditors $9 million worth of Ecuador's debt at a discount of 11.875 cents to the dollar. For the groups' payment of $1.07 million Ecuador got a one-to-one conversion of the commercial bank debt into bonds denominated in its own currency, which were used to underwrite conservation of the country's rain forests. So far, most of these swaps have been engineered by conservation groups, although the U.S. Agency for International Development joined WWF last year for a project in Madagascar.

of Economic Organizations), which has set up a "global greenery" fund of Y2 billion ($14.3 million) to be used for such projects as irrigation or irradicating deserts. Corporations given tax relief for similar contributions, the business group has suggested, may prove more active in international environmental matters.

Conclusion

If Japan seriously considers some of its policies to be detrimental to the global environment, chances are high that Tokyo will work with industry to engineer a policy revision. Proposals on how to combat global warming and the harm caused to the ozone layer by chlorofluorocarbons show Japan's confidence in its ability to use technology to cure a multitude of environmental problems. On some fronts, such as whaling and driftnet fishing, policymakers remain unconvinced that a problem exists. In these cases the government has stuck to a call for more scientific information before forming a judgment. On other fronts the pressure of public opinion has been effective. In the case of the African elephant, Tokyo could have sided with the nations that said their policies helped preserve elephant herds. Instead, Tokyo bowed to substantial worldwide pressure, even though the impact hit a traditional craft.

The country's advancement in the international arena has coincided with a growing attempt by nongovernmental organizations to draw attention to what they consider to be controversial practices. The shrinking acreage of rain forests and the link to global warming poses a twofold problem for Japan, which relies on imports from the forests but also is concerned with the potential problems connected to global warming. Although contending its role in the deforestation is small, Japan hopes to move the exporting nations toward sustainable forestry management and reforestation, partially through improvements in the environmental component of its foreign aid.

Tokyo's use of foreign aid to help resolve environmental problems points out the irony that until recently environmental concerns were unlikely to be considered in awarding developmental aid. But Japan is moving quickly toward increased recognition of its role as a leader through its financial strength and its domestic record of environmental improvements in such areas as CFCs (see JEI Report No. 1A, January 5, 1990). Having moved beyond a pioneer status, Tokyo is at a stage where politically and financially it can help shape environmentally responsible policies that most likely will work toward sustainable development as its goal.

For further information, contact Pat Murdo.

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.

APPENDIX

Table 1: Japan's Wood Imports By Country

(in millions of dollars* and composition)

Year	Total	Indonesia	Malaysia	Philippines	United States
1965	$492.5	$3.4 (0.7%)	$86.0 (17.5%)	$154.3 (31.3%)	$137.6 (27.9%)
1970	1,572.1	176.4 (11.2)	188.8 (12.0)	264.9 (16.8)	517.8 (32.9)
1975	2,620.6	361.3 (13.8)	300.4 (11.5)	160.6 (6.1)	1,061.4 (40.5)
1976	3,531.9	682.6 (19.3)	687.7 (19.5)	145.1 (4.1)	1,170.7 (33.1)
1977	3,802.6	703.4 (18.5)	661.7 (17.4)	150.5 (4.0)	1,239.6 (32.6)
1978	4,135.2	716.2 (17.3)	784.5 (19.0)	172.3 (4.2)	1,358.2 (32.8)
1979	7,353.2	1,534.5 (20.9)	1,575.0 (21.4)	242.0 (3.3)	2,297.1 (31.2)
1980	6,909.0	1,404.4 (20.3)	1,250.7 (18.1)	258.0 (3.7)	2,170.0 (31.4)
1981	4,459.1	641.7 (14.4)	996.9 (22.4)	237.6 (5.3)	1,433.7 (32.1)
1982	4,546.1	458.0 (10.1)	1,326.6 (29.2)	249.6 (5.5)	1,371.1 (30.2)
1983	3,886.8	332.6 (8.6)	1,144.0 (29.4)	135.3 (3.5)	1,181.5 (30.4)
1984	3,909.1	268.4 (6.9)	1,236.6 (31.6)	184.7 (4.7)	1,103.6 (28.2)
1985	3,699.6	136.1 (3.7)	1,179.2 (31.9)	121.8 (3.3)	1,129.4 (30.5)
1986	4,028.7	114.7 (2.8)	1,180.6 (29.3)	74.7 (1.9)	1,323.5 (32.9)
1987	6,226.5	203.5 (3.3)	2,090.9 (33.6)	79.1 (1.3)	1,960.9 (31.5)
1988	7,122.2	301.6 (4.2)	1,852.6 (26.0)	104.8 (1.5)	2,452.3 (34.4)

*The following average annual exchange rates were used to convert the yen import figures to dollars: 1965, Y360.00; 1970, Y360.00; 1975, Y296.69; 1976, Y297.01; 1977, Y270.53; 1978, Y212.17; 1979, Y217.46; 1980, Y227.85; 1981, Y219.94; 1982, Y248.30; 1983, Y237.59; 1984, Y236.91; 1985, Y240.17; 1986, Y170.08; 1987, Y146.01; and 1988, Y128.15.

Source: Japan Tariff Association

Table 2: Japanese-Funded Foreign Forest Conservation Projects

Recipient	Technical Cooperation	Grant Aid	Development Survey
Philippines	Forestry development in Pantabangan (1976-1987 and 1987-1992)	Construction of forestry training center (1978)	
		Fire-fighting system in Pantabangan (1984)	
Indonesia	Reforestation in South Sumatra (1979-1988)	Research center on reforestation (1979)	

Recipient	Technical Cooperation	Grant Aid	Development Survey
Malaysia	Training for reforestation engineering in Sabah (1987-1992)		
Papua New Guinea		Construction of national forest research center (1987)	
Thailand*			National forest management project (1984-1988)
Burma		Training center for forestry development (1987)	
China*		Reconstruction of forest fire damage in Daxinganling (1987)	
Brazil	Forestry research in San Pablo (1979-1986)		
Paraguay	Afforestation project in center of country (1987-1992)		
Ecuador			Forestry research in northeast area (1984-1988)
Senegal		Forest fire prevention project (n.d.)	
Nigeria			Forest conservation and development of semi-arid areas (1986)
Kenya	Forestry training for developing seedlings (1985)	Forestry training center for developing seedlings (1986)	
Tanzania			Forestry project on Kilimanjaro (1985-1988)

*Not listed are recent grant aid to Thailand and to China for environmental conservation centers.

Source: Ministry of Foreign Affairs, Japan's Approach to Environmental Issues of the Globe, September 1989.